UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

DATE:

AUG 0 9 2012

SUBJECT: Removal Site Evaluation for Ponce Waste Disposal (aka Ponce Municipal Landfill),

Ponce, Puerto Rico (CERCLIS ID No. PRD980640957)

FROM: Nick Magriples, On-Scene Coordinator

Removal Action Branch

TO: File

Introduction

The United States Environmental Protection Agency (EPA), Removal Action Branch has been requested to conduct a Removal Site Evaluation (RSE) at Ponce Waste Disposal, a site where no further remedial action is planned (NFRAP). The NFRAP determination signifies that no additional remedial steps will be taken to list the Site on the National Priorities List unless new information warranting further Superfund consideration or conditions not previously known to EPA regarding the Site are disclosed. As of November 17, 2005, EPA had determined that no further remedial action was warranted by the Federal Superfund program at Ponce Waste Disposal.

Site Description and Background

Ponce Waste Disposal (aka Ponce Municipal Landfill) (Site) is an active landfill located one mile west of the Ponce city limits that has been operating since 1970. In the early 1970s it was used for open waste burning and it was not until 1974 that it was converted to a sanitary landfill. It is reported that the landfill had been used on occasion to dispose of industrial and hazardous wastes. The landfill was authorized in 1980 by PREQB to accept heavy metal sludge that contained barium, copper, chromium, nickel, silver, zinc, halogenated organics, sulfides and cyanide. Over a period of five months an estimated 870,000 gallons was disposed of at the Site. A permit application was subsequently approved in 1981 by PREQB for the municipality to operate two hazardous waste lagoons where the heavy metal sludge had been placed. In 1982, EPA determined that the lagoons qualified for RCRA interim status, but the landfill did not. EPA reauthorized RCRA interim status for the landfill in 1983, but it was rescinded in 1984 based upon an inspection. Closure of the lagoons took place in September 1983, but implementation was not conducted with EPA approval. In 1987, the Site began to operate again as a municipal landfill.

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PREQB conducted a site visit in June 2005 and observed the landfill operations. A stormwater pond is used to collect rainwater for use in fugitive dust control. Lined portions of the landfill are used to dispose of asbestos and industrial nonhazardous waste. The leachate water from the industrial cell is applied through irrigation over the cell. A sludge generated from solidification of some of the leachate is applied to the landfill in certain areas for cover.

The entire property covers 123 acres however; the Site itself is approximately 33 acres in size. The Site is located in an area with steep hills that range in elevation from 130 to 450 feet above mean sea level. The Site is surrounded by lightly forested land except on the eastern side where a quarry is present. The closest and largest residential community, Jardines del Caribe, is located approximately 750 feet to the northeast of the Site. There is a small stretch of businesses and/or homes on Road No. 500 directly south of the landfill. An estimated 107,000 persons live within three miles of the Site.

There are reportedly at least six public supply wells within three miles of the Site, the closest of which is one mile away. These wells are located north of both the Site and the aquifers main point of recharge. Groundwater flow is towards the south and there are reportedly no wells downgradient due to the high salinity of the groundwater.

The Quebrada del Agua and remnants of the Rio Pastillo flow in the vicinity of the Site and potentially can receive drainage from the Site. It is reported however, that neither has the potential to affect the surrounding population. There are no known wetlands or critical habitats in the area of the Site. Both streams flow to the Caribbean Sea one mile to the south.

Site assessment activities/observations

The Pre-remedial site files, which included a PREQB Site Reassessment Report (August 2005), was reviewed as part of this RSE. A reconnaissance of the Site was conducted by the Removal Action Branch on January 26, 2012. Currently, the main landfill operation appears to be situated within a valley nearly surrounded by hills. The steep hills on the Site are criss-crossed with bare roadways leading to what appears to be borrow pits and/or other portions of the landfill. The residential neighborhood to the east of the Site is situated adjacent to a series of steep hills; the eastern boundary of the Site.

Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Extensive soil and groundwater sampling and hydrogeological investigations conducted in 1983 and 1984 by the operator of the landfill at the time, CECOS International, Inc., detected chromium (0.078 mg/l), nickel (0.30 mg/l), barium (2.4 mg/l), copper (0.110 mg/l), lead (0.11 mg/l), zinc (0.678 mg/l), benzenehexachloride (31 ug/l), trans-1,2 dichloroethylene (22 ug/l), dieldrin (0.59 ug/l) and endosulfan (0.99 ug/l) in the groundwater. Soil borings from the former lagoon area reportedly identified low levels of cyanide, lead, zinc and halogenated organics. Cyanide, barium and trace amounts of PCBs were identified in the landfill.

Threats to Public Health or Welfare

Based on the available information it would appear that there is a limited potential threat to the municipal water supply wells since groundwater flow is in the opposite direction. Any contamination that may exist in the subsurface is not available for direct contact. There are no indications to suggest that the Site poses a threat that would need to be addressed through the Removal Program.

Threats to the Environment

At this time there is no documentation to indicate that the Site is currently having an acute impact to any sensitive environments or natural resources.

Conclusions

Based on the available information, the Site does not warrant a CERCLA removal action at this time.